

CLAIMS

1. In a wireless communication system in which a remote station
transmits a reverse link signal comprising a plurality of subchannel signals, a
power control subsystem located in a base station for independently adjusting
the transmission power of each of said plurality of subchannel signals,
comprising:

receiver means for receiving said reverse link signal and demodulating
said reverse link signal to provide said plurality of subchannel signals;

quality measurement means for receiving each of said plurality of
subchannel signals and for measuring the quality of each of said subchannel
signals; and

message generator means for generating a power control message for
adjusting the transmit power of at least one of said plurality of subchannel
signals.

2. The power control system of Claim 1 further comprising:

a modulator for modulating said power control message in accordance
with a modulation format.

3. In a wireless communication system in which a remote station
transmits a reverse link signal comprising a plurality of subchannel signals
wherein a remote station power control subsystem independently adjusts the
transmit power of each said subchannel signal based upon a received power
control message, said power control subsystem comprising:

receiver means for receiving said power control message and for
providing a plurality of gain values based on said power control message; and

a plurality of gain adjust means, each of said gain adjust means for
receiving a corresponding subchannel signal and a corresponding gain value
and adjusting the gain of said subchannel signal in accordance with said gain
value.

4. A method of controlling transmit power of a remote station which
transmits a reverse link signal comprising a plurality of subchannel signals, said
method comprising:

receiving said reverse link signal;

demodulating said reverse link signal to obtain said plurality of
subchannel signals;

generating a power control message for use in adjusting the transmit
8 power of at least one of said plurality of subchannel signals in accordance with
a quality measurement or an energy measurement associated with a
10 corresponding one of said subchannel signals;
transmitting said power control message to the remote station; and
12 controlling the transmit power of said at least one of said plurality of
subchannel signals in accordance with said power control message.

2 5. The method of Claim 4 wherein the step of generating generates a
power control message for use in adjusting the transmit power of a plurality of
4 said subchannel signals; and
independently controlling the transmit power of said plurality of
6 subchannel signals in accordance with said power control message.

2 6. A method of controlling transmit power of a remote station which
transmits a reverse link signal comprising a plurality of subchannel signals,
wherein the transmit power of one or more of said plurality of subchannel
4 signals is independently adjusted based upon a received power control
message, said method comprising:
6 receiving said power control message;
obtaining one or more gain values from said power control message; and
8 receiving a corresponding subchannel signal and a corresponding gain
value at one or more of a plurality of gain adjusters and independently
10 adjusting the gain of each subchannel signal in accordance with said gain value.